

AMENDMENTS TO THE CLAIMS

1 – 10. (Cancelled).

11. (Currently Amended) An apparatus for mapping the performance of an agricultural tractor during operation in an agricultural field comprising:

a sensor that generates a signal that is representative of an operating characteristic of the agricultural tractor; and

a controller that is responsive to said signal from said sensor and that generates a performance map of the performance of the agricultural tractor as a function of an area during operation in the agricultural field in which the agricultural tractor is operated.

12. (Previously Presented) The apparatus defined in Claim 11 wherein said sensor is an engine sensor that generates a signal that is representative of an operating characteristic of an engine provided on the agricultural tractor.

13. (Previously Presented) The apparatus defined in Claim 12 wherein said engine sensor is a sensor that generates a signal that is representative of the speed of the engine.

14. (Previously Presented) The apparatus defined in Claim 12 wherein said engine sensor is a sensor that generates a signal that is representative of the amount of fuel supplied to the engine.

15. (Previously Presented) The apparatus defined in Claim 11 wherein said sensor is a speed sensor that generates a signal that is representative of the speed of the tractor.

16. (Previously Presented) The apparatus defined in Claim 11 wherein said sensor is a power take off sensor that generates a signal that is representative of an operating characteristic of a power take off provided on the agricultural tractor.

17. (Previously Presented) The apparatus defined in Claim 16 wherein said power take off sensor is a sensor that generates a signal that is representative of the speed of the power take off.

18. (Previously Presented) The apparatus defined in Claim 11 wherein said sensor is a linkage sensor that generates a signal that is representative of an operating characteristic of a three point linkage provided on the agricultural tractor.

19. (Previously Presented) The apparatus defined in Claim 18 wherein said linkage sensor is a sensor that generates a signal that is representative of the draft force of the three point linkage.

20. (Previously Presented) The apparatus defined in Claim 18 wherein said linkage sensor is a sensor that generates a signal that is representative of the position of the three point linkage.

21. (Previously Presented) The apparatus defined in Claim 11 wherein said sensor is a position sensor that generates a signal that is representative of the position of the tractor in the agricultural field.

22. (Previously Presented) The apparatus defined in Claim 21 wherein said position sensor is a global satellite navigation system.

23. (Currently Amended) The apparatus defined in Claim 11 further including an actual speed sensor that generates a signal that is representative of the actual speed of the agricultural tractor over ground, said controller being responsive to said signals from said sensor and said actual speed sensor and generating the performance map of ~~the performance of the agricultural tractor during operation in the agricultural field.~~

24. (Currently Amended) The apparatus defined in Claim 11 further including a theoretical speed sensor that generates a signal that is representative of the theoretical speed of the agricultural tractor over ground if no wheel slip is occurring, said controller being responsive to said signals from said sensor and said theoretical speed sensor and generating the performance map ~~of the performance of the agricultural tractor during operation in the agricultural field.~~

25. (Currently Amended) The apparatus defined in Claim 11 further including a manual input device that generates a signal that is representative of a parameter, said controller being responsive to said signals from said sensor and said manual input device for generating the performance map ~~of the performance of the agricultural tractor during operation in the agricultural field.~~